



Mancozeb 800 WP

Safety Data Sheet

according to the United Nations GHS (Rev. 7, 2017)

SDS reference: IN

Issue date: 9/14/2014 Revision date: 12/2/2021 Version: 1.0

SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture
Name : Mancozeb 800 WP
Synonyms : Manzate 80 WP
Vondazeb
TRIDEX

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Fungicide

1.4. Supplier's details

UPL Limited
CTS No. 610 B/2, Bandra Village,
Off Western Express Highway, Behind Teascher's Colony,
IN- Bandra (East) Mumbai, 400051 – Maharashtra
India
T +91-(022)-7152-8000

1.5. Emergency phone number

Emergency number : This SDS is listed with CHEMTREC. Country specific CHEMTREC emergency numbers stated below are operational 24X7.

Country	Organisation/Company	Emergency number	Comment
India	CHEMTREC	000 800 1007 141	Toll Free
China	CHEMTREC	400 120 4937	Local Number
Hong Kong	CHEMTREC	800 968 793	Toll Free
Japan	CHEMTREC	0800-300-5842	Toll Free
Malaysia	CHEMTREC	+60 3-9212 5794	Local Number
Malaysia	CHEMTREC	1-800-81-5308	Toll Free
Philippines	CHEMTREC	+63 2 8 395 3308	Local Number
Philippines	CHEMTREC	1800 1 116 1020	Toll Free
Taiwan	CHEMTREC	+886 2 7741 4207	Local Number
Taiwan	CHEMTREC	00801-14-8954	Toll Free
Thailand	CHEMTREC	001-800-13-203-9987	Toll Free

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Acute toxicity (dermal), Category 5

H313

Acute toxicity (inhalation:dust,mist) Category 4

H332

Mancozeb 800 WP

according to the United Nations GHS (Rev. 7, 2017)

Reproductive toxicity, Category 2

H361

Hazardous to the aquatic environment — Acute Hazard, Category 1

H400

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

: Suspected of damaging fertility or the unborn child, Harmful if inhaled, Harmful in contact with skin, Very toxic to aquatic life.

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN)

: Warning

Hazardous ingredients

: Mancozeb

Hazard statements (GHS UN)

: H313 - May be harmful in contact with skin
H332 - Harmful if inhaled
H361 - Suspected of damaging fertility or the unborn child
H400 - Very toxic to aquatic life

Precautionary statements (GHS UN)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P312 - Call a POISON CENTER/doctor, if you feel unwell.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Mancozeb	CAS-No.: 8018-01-7	>80

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general

: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact

: Wash skin with plenty of water. Take off contaminated clothing. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Mancozeb 800 WP

according to the United Nations GHS (Rev. 7, 2017)

First-aid measures after eye contact	: Rinse eyes with water as a precaution. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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5.3. Special protective actions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothing. Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and materials for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.
Other information	: Dispose of materials or solid residues at an authorized site.

Mancozeb 800 WP

according to the United Nations GHS (Rev. 7, 2017)

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke during use.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection	: Protective gloves. Wear protective gloves.
Eye protection	: Safety glasses. Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: [In case of inadequate ventilation] wear respiratory protection. Wear appropriate mask
Personal protective equipment symbol(s)	



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Colour	: Yellow colour powder
Odour	: Characteristic odour.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability (solid, gas)	: Non-flammable.
Explosive limits	: Not applicable
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable

Mancozeb 800 WP

according to the United Nations GHS (Rev. 7, 2017)

Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: 5 - 9
pH solution	: Not available
Viscosity, kinematic (calculated value) (40 °C)	: Not applicable
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 0.49 g/ml Tap Density
Relative density	: Not available
Relative vapour density at 20 °C	: Not applicable
Solubility	: Not available
Explosive properties	: Not explosive
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle specific surface area	: Not available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases, Strong oxidizing agents, Quaternary ammonium salts, Sequestering agents

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide, Carbon disulphide, Hydrogen sulphide, Ethylenethiourea

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: May be harmful in contact with skin.
Acute toxicity (inhalation)	: Harmful if inhaled.

Mancozeb 800 WP	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 2.843 mg/l
ATE UN (dust,mist)	1.5 mg/l/4h

Mancozeb 800 WP

according to the United Nations GHS (Rev. 7, 2017)

Mancozeb (8018-01-7)	
LD50 oral rat	≥ 5000 mg/kg
LD50 dermal rat	≥ 5000 mg/kg
LC50 Inhalation - Rat	≥ 5.14 mg/l
Skin corrosion/irritation	: Slightly irritant but not relevant for classification pH: 5 - 9
Serious eye damage/irritation	: Slightly irritant but not relevant for classification pH: 5 - 9
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Mancozeb (8018-01-7)	
Additional data	NOAEL, rat: 125 ppm (4.8 kg bw/g) Not carcinogenic
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified

Mancozeb (8018-01-7)	
Additional information	Not classified
STOT-repeated exposure	: Not classified

Mancozeb (8018-01-7)	
Additional information	Not classified
Aspiration hazard	: Not classified

Mancozeb 800 WP	
Viscosity, kinematic	Not applicable
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Very toxic to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Mancozeb 800 WP	
LC50 - Fish	3.96 mg/l <i>Cyprinus carpio</i>
LC50 - Other aquatic organisms	0.88 mg/l <i>daphnia</i>
EC50 96h algae	0.01943 mg/l/96h <i>Pseudokirchneriella subcapitata</i>

Mancozeb (8018-01-7)	
LC50 - Fish	< 1 mg/l (96h <i>Salmo gairdneri</i>)
EC50 - Crustacea	< 1 mg/l (48h <i>Daphnia magna</i>)
ErC50 algae	< 1 mg/l (72h <i>Selenastrum capricornutum</i>)

12.2. Persistence and degradability

Mancozeb 800 WP	
Persistence and degradability	Not established.

Mancozeb 800 WP

according to the United Nations GHS (Rev. 7, 2017)

Mancozeb (8018-01-7)	
Persistence and degradability	Not readily biodegradable.

12.3. Bioaccumulative potential

Mancozeb 800 WP	
Bioaccumulative potential	Not established.

Mancozeb (8018-01-7)	
Partition coefficient n-octanol/water (Log Kow)	1.38

12.4. Mobility in soil

Mancozeb 800 WP	
Mobility in soil	No additional information available

12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available
Other information	: Avoid release to the environment.



SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with IMDG / IATA

IMDG	IATA
14.1. UN number	
3077	3077
14.2. UN Proper Shipping Name	
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb)
14.3. Transport hazard class(es)	
9	9
	
14.4. Packing group	
III	III

Mancozeb 800 WP

according to the United Nations GHS (Rev. 7, 2017)

IMDG	IATA
14.5. Environmental hazards	
Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes
No supplementary information available	

14.6. Special precautions for user

IMDG

Special provisions (IMDG)	: 274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP02, P002
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: BK1, BK2, BK3, T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197, A215
ERG code (IATA)	: 9L

14.7. Transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

Issue date : 14/09/2014
Revision date : 02/12/2021

Other information : None.

Full text of H-statements:	
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H332	Harmful if inhaled
H361	Suspected of damaging fertility or the unborn child
H400	Very toxic to aquatic life

Safety Data Sheet (SDS), UN

Mancozeb 800 WP

according to the United Nations GHS (Rev. 7, 2017)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.